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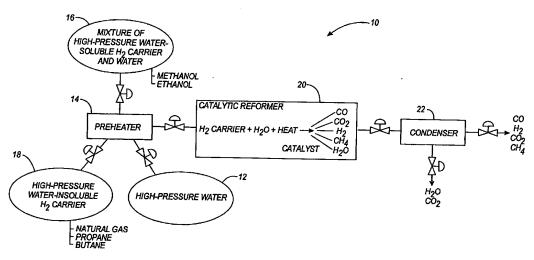
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(54) Title: PROCESS FOR PRODUCING HIGH-PRESSURE HYDROGEN



(57) Abstract: A method and apparatus for use in producing high-pressure hydrogen from natural gas, methanol, ethanol, or other fossil fuel-derived and renewable hydrocarbon resources. The process can produce hydrogen at pressure ranging from 2000 to 12,000 pounds per square inch (psi) using a hydrogen feedstock (16, 18) high pressure water (12, 18), and an appropriate catalyst. Following making and heating in preheater (14), the catalyst reacts with the hydrogen feedstock (16, 18) and high pressure water (12, 18) in a catalytic reformer (20) maintained under desired temperature and pressure conditions. Reformate products exit reformer (200) and flow into condenser (22), in which water and a portion of the carbon dioxide product are condensed.